

Application No. 09/266,202

REMARKS

Claims 1-5, 7-9 and 25-30 are pending. All of the pending claims stand rejected. Applicants respectfully request reconsideration of the rejections based on the following remarks.

Applicants maintain that the claims are clearly allowable over the art of record. Since the Examiner has maintained the rejection, it seems that Applicants have not clearly presented their perspective on the legal issues and/or the factual issues. Applicants attempt to clarify their position in view of advancing prosecution.

Rejection Over Takada

The Examiner rejected claims 1-5, 7-9 and 25-30 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 6,200,680 to Takeda et al. (the Takeda patent). In particular, the Examiner asserts that the Takeda patent teaches zinc oxide particles with an average particle size of 5 nanometers to 100 nanometers with a particle size variation of 30 %. With all due respect, either there is some confusion regarding the disclosure of the Takeda patent, or there is a misunderstanding with respect to the legally required showing with respect to a reference constituting an anticipatory reference. Upon a proper analysis, the Takada patent clearly does not prima facie anticipate Applicants' claimed invention. Applicants respectfully request reconsideration of the rejection based on the following comments.

"In order to constitute anticipatory prior art, a reference must **identically** disclose the claimed compound..." MPEP 2122 (emphasis added), citing In re Schoenwald, 22 USPQ2d 1671, (Fed. Cir. 1992). "For a prior art reference to anticipate in terms of 35 U.S.C. § 102, every element of the claimed invention must be identically shown in a single reference. **These elements must be arranged as in the claim under review**, but this is not an 'ipsissimis verbis' test." In re Bond, 15 USPQ2d 1566, 1567 (Fed. Cir. 1990) (Internal citations omitted and emphasis added).

Application No. 09/266,202

"Every element of the claimed invention must be literally present, arranged as in the claim. The identical invention must be shown in as complete detail as is contained in the patent claim." Richardson v. U.S. Suzuki Motor Corp., 9 USPQ2d 1913, 1920 (Fed. Cir. 1989) (Internal citations omitted, and emphasis added.); see also MPEP 2131. "Here, as well, anticipation is not shown by a prior art disclosure which is only 'substantially the same' as the claimed invention." Jamesbury Corp. v. Litton Industrial Products, Inc., 225 USPQ 253, 256 (Fed. Cir. 1985)(emphasis added).

The Takeda patent describes two different materials: **zinc oxide fine particles** and **zinc oxide-polymer composite particles**. To facilitate the discussion, a schematic description of the two materials is attached. These materials are of course related with the **zinc oxide fine particles** being incorporated into the **zinc oxide-polymer composite particles**. However, it does not follow that the uniformity of the **zinc oxide-composite particles** implies anything specific about the uniformity of the **zinc oxide fine particles**.

The Takada patent does not disclose particles comprising zinc oxide with an average particle diameter less than about 95 nm with a high uniformity as claimed. Thus, the Takada reference does not disclose a composition of matter that falls within the scope of Applicants' claimed invention, so the claim composition is not identically disclosed as required by the case law for an anticipatory reference. The Examiner's analysis is based on mixing the properties of **two different** particulate materials, which simply is not a proper analysis under the MPEP or binding case law.

The Takeda patent describes forming zinc oxide **fin**es using a solution-based approach. See, for example, column 23, lines 16-21. These zinc oxide particles are then formed into **zinc oxide-polymer composite particles**. See column 25, lines 17-24. These **composite particles** comprise zinc oxide, but they have an average particle size from 0.1 to 10 microns. This size range is outside of Applicants' claimed average particle size.

Application No. 09/266,202

It is the **composite particles** that have a "coefficient of particle size variation being not more than 30%, particularly not more than 15%." See column 25, lines 25-36. While this particle size variation may or may not meet the criteria specified in Applicants' claims, this is not relevant since the average particle size of the composite particles is outside of the claimed range. Therefore, the zinc oxide-polymer **composite particles** disclosed in the Takeda patent do not prima facie anticipate Applicants' claimed invention.

With respect to the zinc oxide polymer composite particles, the Takada patent does not give any information about the uniformity of the zinc oxide fine particles such that the Takada patent does not anticipate Applicants' claimed invention by way of the zinc oxide fine particles. In summary, since the present claims do not read onto either the zinc oxide fine particles or the zinc oxide-polymer composite particles, the Takada patent does not teach any materials that fall within the boundaries of Applicants' claimed invention.

Under well established principles, it is NOT appropriate to formulate an anticipation rejection mixing the average particle size of the zinc oxide fine particles with the particle size uniformity of the zinc oxide-polymer composite particles since these are **distinct materials**. The reference does not identically disclose the claimed compound. Specifically, the Takeda patent does not teach zinc oxide particles with an **average particle size** of less than about 95 nanometers and a **particle size uniformity** with a distribution of particle sizes such that at least 95 percent of the particles have a diameter greater than about 40 percent of the average diameter and less than about 160 percent of the average diameter. Therefore, the Examiner simply has not presented a case for prima facie anticipation of Applicants' claimed invention based on the Takeda patent.

Since the Takeda patent does not prima facie anticipate Applicants' claimed invention, Applicants respectfully request withdrawal of the rejection of claims 1-5, 7-9 and 25-30 under 35 U.S.C. § 102(e) as being anticipated by the Takeda patent.

Application No. 09/266,202

CONCLUSIONS

In view of the foregoing, it is submitted that this application is in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully requested.

The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution.

Respectfully submitted,



Peter S. Dardi, Ph.D.
Registration No. 39,650

Customer No. 24113
Patterson, Thuent, Skaar & Christensen, P.A.
4800 IDS Center
80 South 8th Street
Minneapolis, Minnesota 55402-2100
Telephone: (612) 349-5746

Application No. 09/266,202

ATTACHMENT FOR REQUEST FOR RECONSIDERATION

MATERIALS DESCRIBED IN U.S. 6,200,680

- I. Zinc Oxide Fine Particles - Average Primary Particle Size 0.005 to 0.1 microns.



- II. Zinc Oxide-Polymer Composite Particles - Average Particle Size 0.1 to 10 microns. These are formed from zinc oxide fine particles and a polymer. Coefficient of particle size variation not more than 15%.

